

ABSTRACT OF THE DISCLOSURE

Amorphous silicon carbide thin film structures, including: protective coatings for
5 windows in infrared process stream monitoring systems and sensor domes, heated
windows, electromagnetic interference shielding members and integrated micromachined
sensors; high-temperature sensors and circuits; and diffusion barrier layers in VLSI
circuits. The amorphous silicon carbide thin film structures are readily formed, e.g., by
sputtering at low temperatures.